On page 12, please replace the second full paragraph with the following:

PCR conformation Plant DNA extraction on T_0, T_1, and T_2 was performed using the QIAGEN DNeasy Mini Kit on putative transgenic samples and untransformed plants. PCR primers were designed using Primer Premier software and made by GIBCO BRL. Primer (8p:5'~~ATCACCGCTTCCCTCATAAATCCCTCCC~~ CCACCTACAGACGCTTTACGCCCAATCA 3')(SEQ ID NO: 2) anneals with the 5' end of the aadA and primer (8M:5' ~~CCACCTACAGACGCTTTACGCCCAATCA~~ ATCACCGCTTCCCTCATAAATCCCTCCC 3')(SEQ ID NO: 1) anneals with the 3' end of 16SrDNA as shown in Figure 3. PCR was carried out using the Gene Amp PCR system 2400 (Perkin-Elmer). Samples were run for 29 cycles with the following sequence: 94°C for 1 minute, 65^{0}C for 1 minute and 72°C for 3 minutes. The cycles were proceeded by a 94°C denaturation period and followed by a 72°C final extension period. A 4°C hold followed the cycles. PCR products were separated on agarose gels.

On page 16, please replace the sixth full paragraph with the following:

DeCosa B, Moar W, Lee S.B, Miller M, Daniell H. ~~(2000)~~ (2001) HyperExpression of the Cry2Aa2 operon in chloroplasts leads to the formation of insecticidal crystals. ~~Nat. Blotechnol. In press~~ Nature Biotechnology, Vol. 19, No. 1, pp 71-74.

IN THE CLAIMS

Please cancel Claims 11 and 14 without prejudice and without disclaimer of the subject matter contained therein. Please amend claims 1-10, 12-13, and 15-18 as follows:

Version with Markings Showing Changes Made to the Claims

1. (Amended) A ~~stable~~ plastid transformation and expression vector for stably transforming a plastid which comprises an expression cassette comprising, as operably linked components in the 5' to the 3' direction of translation, a plastid promoter which is operative in said plastid, a selectable marker sequence, a heterologous DNA coding sequence~~-coding~~ for a cytotoxic antimicrobial peptide (AMP), a transcription termination sequence functional in said plastid, and flanking each side of the expression cassette, a flanking DNA ~~sequences~~sequence which ~~are~~is homologous to a DNA sequence of the ~~target~~ plastid genome, whereby stable integration of the heterologous DNA coding sequence into the plastid genome of ~~the~~a target ~~plant~~plant's cell is facilitated through

homologous recombination of the flanking sequence with ~~the~~a homologous ~~sequences~~sequence in the ~~target~~ plastid genome.

2. (Amended) ~~A~~The vector of claim 1, wherein the plastid is selected from the group consisting of ~~chloroplasts~~chloroplast, ~~chromoplasts~~chromoplast, ~~amyloplasts~~amyloplast, proplastide, ~~leucoplasts~~leucoplast and ~~etioplasts~~etioplast.

3. (Amended) ~~A~~The vector of claim 1, wherein the cytotoxic antimicrobial peptide is selected from the ~~groups~~group consisting of ~~defensins~~defensin, ~~PGLA~~PGLa (frog skin), ~~cecropins~~cecropin, ~~apidaecins~~apidaecin, melittin, bombinin and magainin.

4. (Amended) ~~A~~The vector of claim ~~3~~1, wherein the cytotoxic antimicrobial peptide is magainin I or II.

5. (Amended) ~~A~~The vector of claim 1, wherein the selectable marker sequence is not an ~~antibiotic-free~~antibiotic selectable marker sequence.

6. (Amended) ~~A universal integration and expression~~The vector of claim 1 wherein the vector is competent for stably ~~transforming~~integrating into a plastid ~~genome~~ of different solanaceous, monocotyledonous or dicotyledonous plant species and wherein the flanking DNA sequences are homologous to a spacer sequence ~~of~~in the ~~target~~ plastid ~~genome~~ and the heterologous DNA coding sequence is conserved in the plastid ~~genome~~ of ~~different~~solanaceous, monocotyledonous or dicotyledonous plant species.

7. (Amended) A stably transformed plant and progeny thereof, which comprises a plastid stably transformed with the vector of claims 1, 2, 3, 4, 5 or 6 ~~or the progeny thereof, including seeds~~.

8. (Amended) ~~A~~The stably transformed plant of claim 7 ~~which~~wherein the plant is a solanaceous plant.

9. (Amended) ~~A~~The stably transformed plant of claim 7 ~~which~~wherein the plant is a monocotyledonous or dicotyledonous plant.

10. (Amended) ~~A~~The stably transformed plant of claim 9 ~~which~~wherein the plant is maize, rice, grass, rye, barley, oat, wheat, soybean, peanut, grape, potato, sweet potato, pea, canola, tobacco, tomato or cotton plant.

12. (Amended) ~~A~~The stably transformed plant of claim 7 ~~in which all the chloroplasts are uniformly~~wherein a chloroplast is stably transformed.

13. (Amended) ~~A~~The stably transformed plant of claim 7 ~~in which~~wherein the transformed plastid of the ~~plants including~~plant and subsequent generations of the stably transformed plant are ~~capable of~~can exhibit enhanced levels of exogeneous gene expression.

15. (Amended) A method for stably transforming a target plant to control a phytopathogenic bacteria ~~which~~, wherein the method comprises ~~introducting an~~introducing the integration and expression vector of claims 1, 2, 3, 4, 5 or 6 into a plastid ~~genome~~ of the target plant, and allowing the ~~transformed~~target plant to ~~grow~~control phytopathogenic bacteria.

16. (Amended) ~~A~~The vector of any one of claims 1 – ~~14~~6, wherein the antimicrobial peptide is a cationic amphiphipathic alpha-helix molecule which has affinity for negatively charged phospholipides in the outer membrane of ~~the~~a target bacteria and ~~which is functional to form~~forms aggregates that disrupt and lyse the bacterial membrane of the target ~~microbe~~bacteria, and in the prevention of the spread of infection by the target bacteria.

17. (Amended) ~~A~~The vector of any one of claims 1-~~14~~6, wherein said vector further comprises a ribosome binding site (rbs) and a 5' untranslated region (5'UTR).

18. (Amended) ~~A~~The method of claim 15, wherein said vector further comprises a ribosome binding site (rbs) and a 5' untranslated region (5'UTR).

REMARKS

Applicant acknowledges Examiner's objections to Claims 1-18. Applicant has canceled Claims 11 and 14, and amended Claims 1-10, 12-13, and 15-18 to respond to any issues raised in the official action. No new matter has been added. Claims 1-10, 12-13 and 15-18 are now pending in the application and Applicant asks for consideration of the claims as amended.

In response to the detailed Action, Applicant acknowledges and appreciates the approval of the drawings as submitted. Further, the Applicant has amended the application to comply with the sequence requirements set forth in 37 C.F.R. §§ 1.821-1.825, and, as a result, sequence identifiers have been provided for the primers on page